

REMARKS

The application includes claims 7-24 prior to entering this amendment.

The examiner rejects claims 7-24 under 35 U.S.C. § 102(e) as being anticipated by Drott et al. (U.S. Patent 6,094,683).

The applicant amends claims 7 and 20.

The applicant adds claims 25-26.

The application remains with claims 7-26 after entering this amendment.

The applicant traverses all rejections.

The applicant adds no new matter and requests reconsideration.

Title Objection

MPEP 606.01 states “[w]here the title is not descriptive of the invention claimed, the examiner should require the substitution of a new title that is clearly indicative of the invention to which the claims are directed.” The applicant submits that the title, as presented, is descriptive of the invention claimed. The title as presented is A Call Control System and Method for Automatic Routing of Circuit Switched Data Connections Based upon Stored Communication Link Information. Claim 7 refers to a call control system for routing connections based on stored information about the originating means. Claim 20 refers to a method of conducting a multi-link session which routes connections based upon stored connection characteristic information. Therefore, the applicant submits that the title as presented is consistent with the claims and is adequately descriptive of the invention claimed.

The Examiner proposes that the title should be changed to reflect “retrieving connection characteristic of a first communication link after ending the first communication link and before ending the second communication link.” See Office Action page 2, paragraph 2. This feature is found in claim 21 of the application, but it is only one aspect of the claim. The bulk of the claims are directed to routing connections responsive to stored information. Consequently, the applicant does not agree that amending the title to recite this one aspect of one of the independent claims would provide a title that meets the requirements of MPEP 606.01. Therefore, the applicant requests that the Examiner withdraw the objection to the Title.

Claim Rejections Under § 102

The most recent Office Action, like several that preceded it, refers back to the Examiner's original arguments in the Office Action dated May 8, 2006. For the sake of clarity, the applicant will reiterate the Examiner's position below, where appropriate.

Regarding claim 7, the Examiner proposes that (referring to FIG. 1 of Drottat):

- Switches 124 and 126 are equivalent to the recited first and second switch means;
- End Point Device 102 is equivalent to the recited originating means;
- End Point Device 106 is equivalent to the recited terminating means;
- the "sum of all ports including their drive/software" in switch 126 is equivalent to the recited server means;
- "a port and its software/driver" in switch 126 is equivalent to the recited multiple device means;
- "wires" are equivalent to the recited corresponding transmission means; and
- Topology Database 121 is equivalent to the recited routing means.

Claim 7 recites "the first switch means is also configured to request a connection by sending a set-up message means responsive to a request means from the originating means." Drottat does not teach that its switch 124 sends a set-up message responsive to a request from end point device 102. Drottat also does not disclose a connection between its end point devices 102 and 106. End point devices 102 and 106 are only taught as "the source or destination of packets that are transmitted over the network 100 to another end point device." See Drottat column 2, lines 10-12. Since no connection exists between end point devices 102 and 106, it is not surprising that Drottat does not teach that its switch 124 sends a set-up message responsive to a request for a connection from end point device 102. Drottat is directed to bundling of links between individual network nodes, not establishing communication links across the entire network. See Drottat Summary of the Invention.

Although not explicit, the Examiner seems to be relying on some sort of inherency as to how Drottat teaches a set-up message means and a request means. In other words, the Examiner is proposing that since connections exist in the network of Drottat, set-up and request messages are inherent in the operation of the network. "When relying on the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art." MPEP 2112(IV), *citing Ex parte Levy*, 17

USPQ2d 1461, 1464 (Bd. Pat. App. & Inter., 1990), emphasis in original. “Furthermore, the fact that a certain result may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” MPEP 2112(IV), citing In re Rijckaert, 9 F.3d 1531, 1534 (Fed. Cir. 1993). Even if Drottat did teach a communication link between end point devices 102 and 106, that link would not necessarily have to go through switch 124 (for instance, it could go through link 135 to another switch in the Fabric 110) and so would not require switch 124 to send a set-up message. In other words, the Examiner’s assertion that, in general, set-up and request messages exist in a network system, does not result in Drottat anticipating set-up and request messages originating from two specific elements in the claimed network.

Claim 7 also recites “server means coupled to the second switch means by a plurality of transmission means, where the server means is also coupled to the terminating means so as to support a multi-link connection with the terminating means, the server means having multiple device means, each device means being coupled to the second switch means through a corresponding one of the transmission means.” The Examiner proposes that the switch 126 is the recited second switch, the ports in switch 126 are the recited server means, ‘wires’ are the recited transmission means, each of the ports in switch 126 is one of the recited device means, and the end point device 106 is the recited terminating means. The applicant would first like to point out that there are no ‘wires’ shown in the figures of Drottat connecting the ports in switch 126 to the switch 126. The only place, in the entire disclosure of Drottat, that the word ‘wire’ is used is at column 2, lines 3-4, where it says “[a] link includes one or more wires.” Since the links of Drottat (for instance, 136, 137, 138, and 139) are not part of the switch 126 and do not connect the ports of switch 126 to switch 126, these ‘wires’ cannot anticipate the transmission means recited in the claim. Consequently, the applicant submits that there is nothing in Drottat that could be considered equivalent to the recited transmission means.

Further, the claim requires a second switch means coupled to a server means. By maintaining the position that the ports in the switch 126 are a server means and the switch 126 is a switch means, despite the fact that they are recited as two separate elements in the same clause, the Examiner is suggesting that somehow the ports of the switch 126 are separate from the switch itself. It would be immediately apparent to one of ordinary skill in the art of networking that a network switch is useless without its associated ports. In other words, a network switch cannot perform the functions of a network switch without having some ports to communicate with the network, and so the ports of switch 126 in Drottat have

to be considered an integral part of the switch. Therefore, the Examiner's assertion that the single switch 126 anticipates both the second switch and the server means recited in claim 7 is improper.

The Examiner further asserts that the ports of switch 126 are also the multiple device means recited in the claim. When an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms. *See Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004). "The use of [two] terms in close proximity in the same claim gives rise to an inference that a different meaning should be assigned to each. *See Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.2d 1572, 1579 (Fed. Cir. 1996) (stating that if two terms described a single element, 'one would expect the claim to consistently refer to this element [with one or the other of the two terms], but not both, especially within the same clause')." *Id.* Claim 7 recites both a server means and multiple device means within the same clause, so the ports of switch 126 in Drottat cannot anticipate both of these elements.

Claim 7 requires that each of the device means is coupled to the second switch means by a corresponding transmission means. As described above, there is no element in Drottat that could be fairly considered equivalent to the recited transmission means. Further, there is no element in Drottat, either in FIG. 1 or elsewhere, shown or taught as coupling the ports of switch 126 to switch 126, much less a plurality of such elements each coupling a corresponding one of the ports to the switch 126. For this additional reason, the ports of switch 126 in Drottat cannot be equivalent to the recited multiple device means.

Claim 7 refers to a routing means that is configured to direct routing of a subsequent link request through a selected device means if the originating means is found in stored data. Drottat actually teaches the opposite of this. Since the Examiner has already proposed that the ports of switch 126 are the recited device means, in order to anticipate this feature of the claim, Drottat would have to teach that it routes subsequent communication links through the same port in switch 126 as previous links were routed. It should be noted that Drottat does not speak in terms of existing and subsequent communications links. The entire disclosure of Drottat is directed to bundling of links for routing of existing communications. Therefore, there is no element or teaching in Drottat that could be considered equivalent to the recited subsequent communication link. Also, rather than routing multiple links through a single port Drottat actually teaches that packets on a single port are divided up and sent through multiple ports (striped). See Drottat FIG. 3 and column 4, lines 17-30. Consequently, not

only does Drottat not teach directing subsequent links through a selected device means, it actually teaches the opposite; splitting existing communications into multiple, bundled links.

For at least the reasons identified above, Drottat fails to anticipate claim 7 because it does not teach or suggest all of the features recited in the claim. Consequently, claim 7 and its dependent claims, 8-19, are allowable over Drottat and the applicant requests allowance. New claims 25-26 depend from claim 7, and are likewise allowable over the prior art for the reasons we detail above.

Further regarding claim 8, the claim recites “the routing means reserves timeslots on the corresponding transmission means serving the selected device means.” Drottat does not teach that its topology database 121 reserves any time slots. The Examiner argues that since the network communications of Drottat are clocked, the timeslots are anticipated. However, even if the timeslots were taught by Drottat, reserving the timeslots for communications is not taught. There is no mention in Drottat of reserving timeslots or even links; all bundling in Drottat is taught as effective immediately. See Drottat column 6, lines 28-43. Finally, the claim specifically requires reserving timeslots *on the selected device means*. There would be no point for reserving timeslots on a specific port carrying a communication in Drottat because the whole disclosure is directed to distributing the communication on a specific port out to other ports. For at least this additional reason, claim 8 is not anticipated by Drottat.

Further regarding claim 9, the claim recites “the routing means...transmitting a common channel signaling message means to the server means.” Using the equivalencies proposed by the Examiner, to anticipate this claim, Drottat would have to teach that its topology database 121 transmits a common channel signaling message to the ports on switch 126. Drottat does not teach that its topology database 121 transmits any messages or even has the capability of transmitting anything. Drottat does teach that its fabric manager 120 transmits configuration cells, but these are transmitted to the switches themselves, not to the ports. Finally, these configuration cells transmitted by the fabric manager 120 are for configuring the switches, not reserving timeslots on the ports. See Drottat column 6, lines 28-33. For at least this additional reason, claim 9 is not anticipated by Drottat.

Further regarding claim 10, the claim recites “blocking termination of a connection other than the multi-link connection with the originating means when a number of available timeslots not used for the multi-link connection with the originating means is less than or equal to the timeslots.” In order to anticipate this claim, Drottat would actually have to teach that it somehow determines a number of timeslots used and/or available on each of its ports.

Drottat does not teach this. Nowhere in the disclosure of Drottat is the word ‘timeslot’ or its

equivalent used; much less determining a number of timeslots used or available on its ports. Further, Drottat does not teach that any connections are blocked in its network. The Examiner argues that the Abstract of Drottat teaches that all communications not involved in the bundled links are blocked. See Office Action page 4, section d. In other words, the Examiner is proposing that all communications not on a bundle on Drottat's network are blocked when a bundled link is formed. The Abstract of Drottat does not say this and this assertion is diametrically opposed to the entire teaching of Drottat, which is to improve network communications, not to grind them all to a halt, save one bundled link. For at least these additional reasons, claim 10 is not anticipated by Drottat.

Further regarding claim 12, the claim recites "the server means responsive to detecting multi-link protocol data on the first link, transmits a message means to the routing means." Drottat does not teach that the ports on the switch 126 are capable of detecting multi-link protocol on a communications link. Drottat does not disclose any sort of detection functionality on its ports. Finally, Drottat does not teach that all of its ports on the switch 126 (the server means, according to the Examiner) transmit any messages to the topology database 121. The Examiner argues that since multiple links are bundled, a server means must be transmitting messages. However, this argument misses the point. The Examiner has proposed that the ports on switch 126 are the server means, so to anticipate this claim, Drottat must teach that the ports transmit the messages. Drottat does not teach this. For at least these additional reasons, claim 12 is not anticipated by Drottat.

Further regarding claim 14, the claim recites "the routing means...transmitting a common channel signaling message means to the second switch means that identifies the transmission means corresponding to the selected device means." In order to anticipate this claim Drottat would have to teach that its topology database 121 transmits a message to switch 126 identifying a 'wire' corresponding to a selected port in the switch 126. Drottat does not teach this. As discussed previously, Drottat does not teach anything about these 'wires', much less that the topology database transmits a message to switch 126 identifying the 'wires'. For at least this additional reason, claim 14 is not anticipated by Drottat.

Further regarding claim 15, the claim recites "the routing means directs routing of all connections from the originating means to the terminating means through the selected device means." As discussed previously, Drottat does not teach that more than one communication is routed through a specific port. Rather, Drottat teaches the opposite; a single communication broken out into several ports. Therefore, Drottat cannot teach that all connections from end point device 102 to end point device 106 are through a single one of

the ports in switch 126. This is completely contradictory to the whole point of Drottat. For at least this additional reason, claim 15 is not anticipated by Drottat.

Further regarding claim 16, the claim recites “the data entry means identifies connections originating from any one of a set of originating phone numbers as a link in the multi-link connection with the originating client.” The words ‘phone number’ or ‘phone’ are not found anywhere in the disclosure of Drottat. Drottat does not teach that any of its network devices are connected to the network via a phone or that its end point device 102 has one or more phone numbers associated with it. Consequently, Drottat does not teach a data entry means identifying connections originating from any one of a set of originating phone numbers. For at least this additional reason, claim 16 is not anticipated by Drottat.

Further regarding claims 17 and 18, the claims require that the routing means is integrated into the first and second switch means, respectively. Drottat does not teach that its topology database 121 is integrated into either of the switches 124 or 126. The Examiner argues that switches are routers or that switches contain routers. See Office Action pages 4-5, section g. However, even if this were true, it still does not meet the features of the claims. The claims do not recite that *a router* is integrated into a switch; the claims recite that *the routing means* is integrated into a switch means. The Examiner has previously identified the topology database 121 as equivalent to the recited routing means. So, to anticipate this claim, Drottat would have to teach that the topology database 121 is integrated into either of switches 124 or 126. Drottat does not teach this. For at least this additional reason, claims 17 and 18 are not anticipated by Drottat.

Regarding claim 20, the claim recites “receiving a set up message from a source client.” Nothing in Drottat teaches receiving a set up message from a source client. The entire disclosure of Drottat assumes that a connection exists between adjacent nodes at power-up, and the nodes begin using this connection immediately by sending idle characters to each other. See Drottat column 5, lines 24-34. Claim 20 further clarifies that the set up message requests a first communication link between the source client and a termination client. As discussed previously, Drottat does not even teach that a connection exists between end point devices 102 and 104. The examiner proposes that Drottat teaches this feature at column 2, line 48-et seq. See Office Action dated May 8, 2006 paragraph 18a. However, this portion of Drottat simply describes how packets of information are transmitted over a single link. See Drottat column 2, lines 48-49. Drottat says nothing about how this single link is established or that the establishment of the single link includes receiving a set up message from a source client requesting a communication link to a termination client, as

recited in the claim. Nothing in the remaining disclosure of Drottar remedies this deficiency. Further, as argued above with respect to claim 7, the mere fact that a connection exists in a network in Drottar does not anticipate claim features that specifically recite steps in establishing a connection between two specific network elements.

Claim 20 further recites “detecting a request for a second communication link from the source client.” The examiner proposes that Drottar teaches this feature at column 7, lines 20-30. See Office Action paragraph 18b. However, this section of Drottar describes how fabric manager 120 can reconfigure nodes in response either to polls to the nodes or interrupts sent by the nodes. The interrupts notify fabric manager 120 of network congestion. See Drottar column 7, lines 20-23. There is nothing in Drottar to suggest that an interrupt in response to network congestion is a request for a second communication link, as recited in claim 20. The Examiner argues that “congestion, in Drottar, suggests an interruption in the communication.” See Office Action dated March 23, 2007 page 5, section i. However, one of ordinary skill in the art of network communications would not equate network congestion with interruptions in communication. Network congestion typically leads to reduced communication speeds, not communication interruptions. Further, even if network congestion were to be considered interruptions in communications, the claim features are still not met because a notification of network congestion is not a request for a second communication link, as recited in the claim. All that Drottar teaches is that fabric manager 120 may be notified by some node that there is network congestion and then the fabric manager 120 may halt communications and reconfigure the links. Therefore, Drottar does not teach the recited request for a second communication link.

Claim 20, as amended requires that the second communication link be routed without interrupting the first communication link. Drottar specifically requires that in response to network congestion, the fabric manager 120 halts communications to establish the bundled link. Therefore, Drottar does not teach routing the second communication link, as recited in the claim.

For at least these reasons, claim 20 and its dependent claims, 21-24, are allowable over Drottar and the Applicant requests allowance.

Further regarding claim 23, the claim recites “receiving a signaling channel message requesting connection on a transmission facility serving the terminating device.” Once again, the Examiner does not point to any specific teachings of Drottar that could be considered equivalent to the signaling channel message, the transmission facility, or the terminating device. This is especially the case, since reading claim 23 in the context of claim 21 from

which it depends, the request is for connection on a transmission facility serving the terminating device that is already carrying the first communication link. There is nothing in Drottat to teach or suggest this feature. For this additional reason, claim 23 is allowable over Drottat and the applicants request allowance.

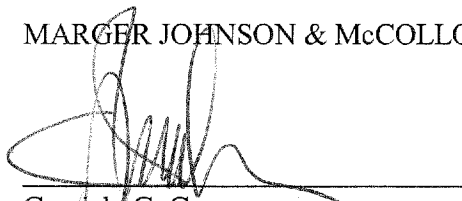
Further regarding claim 24, the claim recites "blocking connection requests for the second communication link on any transmission facility that does not directly serve the terminating device." As argued above with respect to claim 20, Drottat does not teach receiving a request for a second communication link. Further, even if Drottat did teach receiving a request for a second communication link, it does not teach blocking such a request for any transmission facility that does not directly serve a terminating device. The examiner points to column 7, lines 31-54 of Drottat as teaching this feature, but this section of Drottat merely describes how fabric manager 120 manages a link failure. It says nothing about blocking a request for a communication link, as recited in the claim. Further, as argued above with respect to claim 10, Drottat does not teach blocking all connections except for the ones on the bundled link, as the Examiner has proposed. For this additional reason, claim 24 is allowable over Drottat and the applicants request allowance.

Conclusion

For the foregoing reasons, the applicant requests reconsideration and allowance of remaining claims 7-26. The applicant encourages the examiner to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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